

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number
WO 2005/016455 A2

(51) International Patent Classification⁷: A61P 07/02,
A61K 39/395, C07K 16/36

(21) International Application Number:
PCT/BE2004/000118

(22) International Filing Date: 16 August 2004 (16.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0319118.6 14 August 2003 (14.08.2003) GB
0319345.5 18 August 2003 (18.08.2003) GB

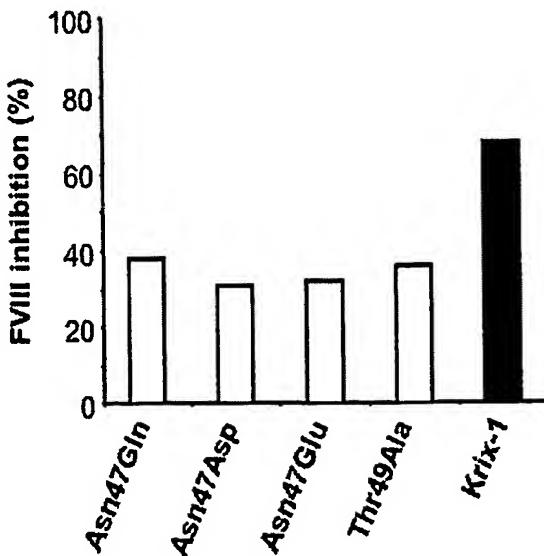
(71) Applicant (for all designated States except US): D. COLLEN RESEARCH FOUNDATION VZW [BE/BE]; Onderwijs & Navorsing, Campus Gasthuisberg, Herestraat 49, B-3000 Leuven (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SAINT-REMY, Jean-Marie [BE/BE]; Rue du Lambais 79, B-1390 Grez-Doiceau (BE). JACQUEMIN, Marc [BE/BE]; Rue Morimont 45, B-5330 Sart-Bernard (BE).

(74) Agents: BIRD, William, E. et al.; Bird Goen & Co, Klein Dalenstraat 42 A, B-3020 Winksele (BE).

(54) Title: VARIABLE ANTIBODIES



(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(57) Abstract: The present invention discloses inhibitory antibodies against Factor VIII with modified glycosylation, either by enzymatic deglycosylation or by site directed mutagenesis. Said antibodies with modified glycosylation have equal affinity for FVIII but show different inhibiting properties. The use of one or a mixture of said antibodies allow modulation of the inhibition of factor VIII to levels between 40 and 95%. The present invention further disclosed pharmaceutical compositions comprising inhibitory antibodies against Factor VIII with modified glycosylation, combinations of these antibodies and methods for treating haemostasis disorders using said antibodies and antibody mixtures.